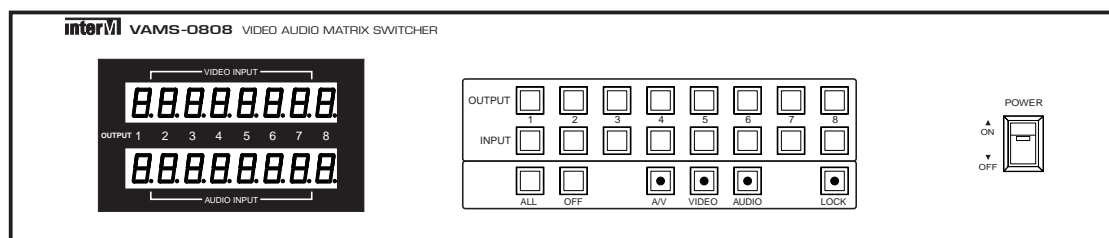


Operating Manual

VAMS-0808 Video Audio Matrix Switcher



interM

Contents

1. Unpacking	1
2. Definition	1
3. Features	2
4. Front Panel Controls.....	3
5. Rear Panel Controls	5
6. RS-232C Operation.....	7
7. Installation	7
8. Using the Matrix.....	8
9. Connections.....	11
10. Block Diagram.....	12
11. Specifications.....	13

OFFICE :

226-9 DUGJUNG - LI, HOE CHUN - EUB,
YANGJU - KUN, KYUNGKI - DO, KOREA
TEL : 82-31-860-7041~8, FAX : 82-31-858-1907

Home Page : <http://www.inter-m.com>

E-mail : export@inter-m.com

Unpacking

It is neither complicated to install nor difficult to operate your Video Audio Matrix Switcher. However, a few minutes of your time are required to read this manual for a properly wired installation and to become familiar with its many features. Please take great care in unpacking your set and do not discard the carton and other packing. They may be needed if it ever becomes necessary to return your set for servicing. Never place the unit near radiators, in front of heating vents, in direct sun light, in excessive humidity or dusty locations so as to avoid early damage and to provide years of quality use. Connect your complimentary components as illustrated in the following pages.

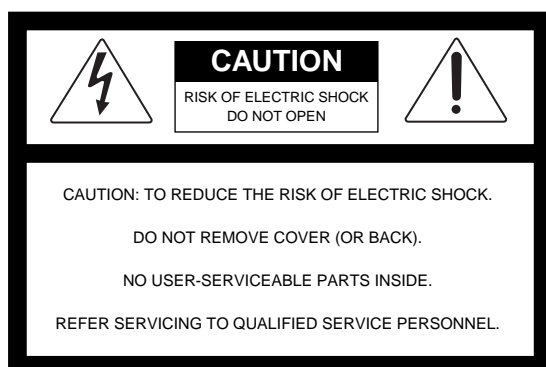
Definition

VAMS-0808 is a full matrix switcher which can represent 8 A/V inputs to any 8 A/V outputs simultaneously without any A/V thermal noise.

This machine includes microprocessor controller, so it's easy to control and it allows to be displayed the present setting at STATUS WINDOW DISPLAY.

Besides PC can control the matrix system by RS-232 communication interface.

In addition two VAMS-0808 may be cascaded for control via a signal port by configuring one VAMS-0808 as a MASTER.



WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

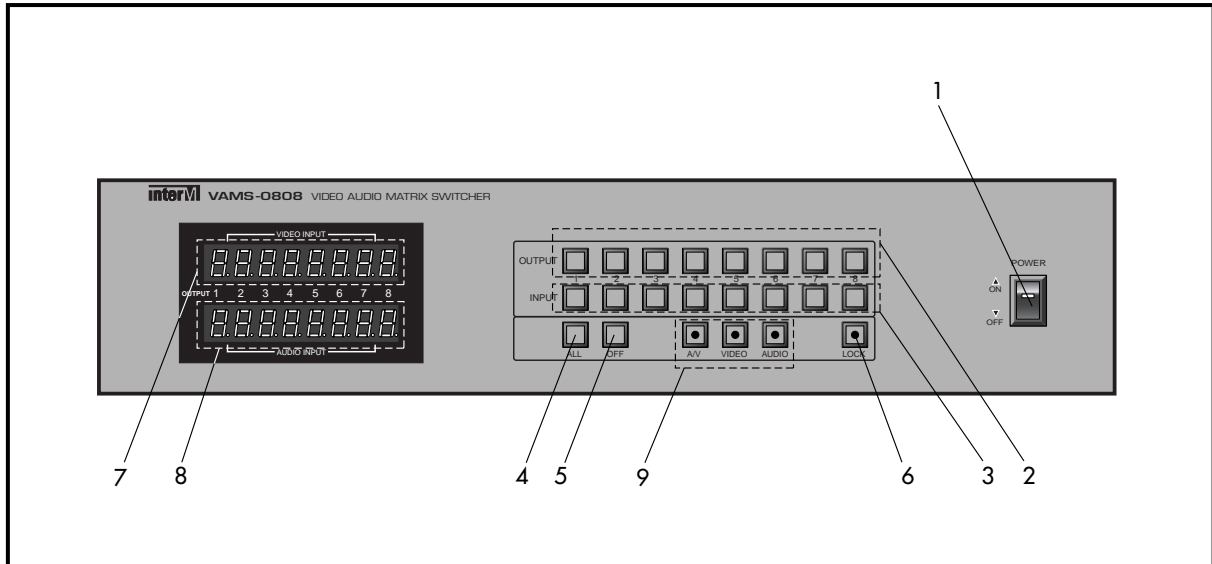
Caution: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

Attentions: Pour prévenir les chocs électriques ne pas utiliser cette fiche polarisée avec un prolongateur, une prise de courant ou une autre sortie de courant, sauf si les lames peuvent être insérées à fond sans en laisser aucune partie à découvert.

Features

- 8×8 A/V matrix switcher.
- Simple and simultaneous output and disconnection function.
- Audio/Video random control function.
- Low crosstalk and wideband frequency response.
- Parallel connection.
- RS-232C interface.
- Restore to the first setup mode in case of power failure.
- Vertical interval switching function with GENLOCK in channel changing.
- Lock function for protecting a configuration from user's mishandling.

Front Panel Controls



1. POWER SWITCH
Power ON/OFF switch.
2. OUTPUT SELECT SWITCH
Selects output channel. When this button is pressed, the status of the selected channel is blinked. During the blinking select any input channels, then the status of display is changed as the selected input channel and the blinking is stopped. If the selection doesn't exist for 10 seconds approximately, the selection is cancelled.
3. INPUT SELECT SWITCH
Represents the selected input channel to each output channel.
4. ALL SWITCH
Selects all output channels. Press this button, and the status display of all channels are blinked. If the selection doesn't exist for 10 seconds approximately, the selection is cancelled. This function is very useful when one input is displayed to all outputs or when user wants to disconnect all outputs.
5. OFF SWITCH
This button disconnects an output channel. If user press this button after select the OUTPUT SELECTING BUTTON, the selected status display indicate "0" and the output is nothing.
6. LOCK SWITCH
Switch for protecting a configuration from mishandling. After the setting is completed, press this button 5 times then the light of this switch is blinked and all buttons can't be controlled.
If user want to cancel this function, just press this button 5 times then the light is off.
Lock function isn't cancelled even if this machine is on and off.
7. STATUS DISPLAY (VIDEO)
Displays the video configuration. The figure of status display represents which video inputs are transferred to video output terminals.
"1~8" indicate each channel and "0" means non output.

8. STATUS DISPLAY (AUDIO)

Displays the audio configuration. The figure of status display represents which audio inputs are transferred to audio output terminals.

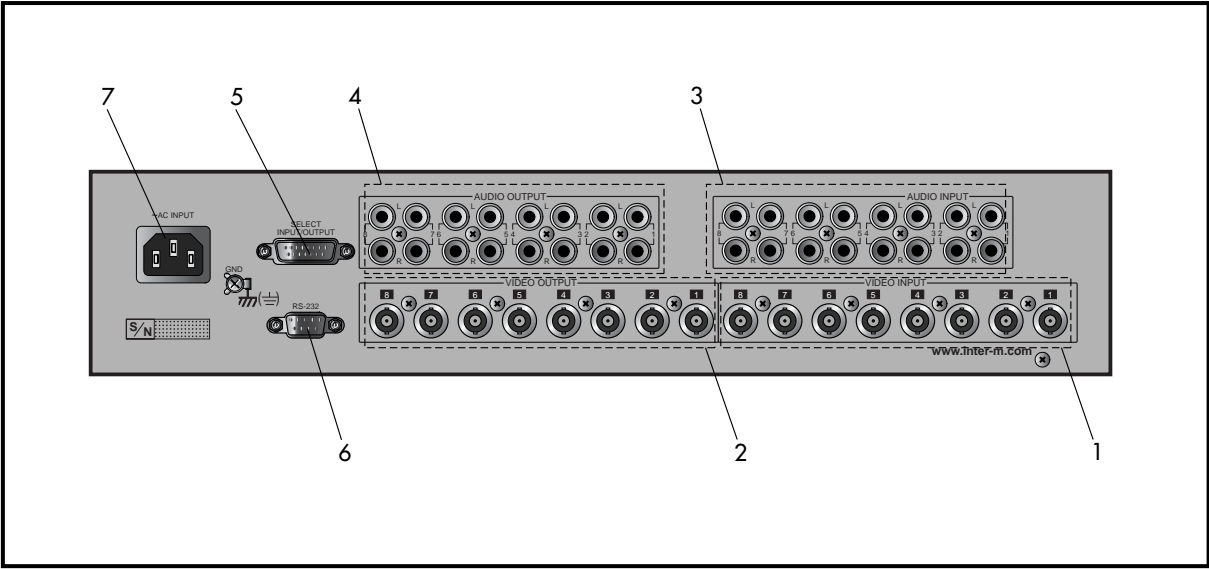
"1~8" indicate each channel and "0" means non output.

9. IN/OUT SELECT SWITCH MODE (A/V, VIDEO, AUDIO)

Represents the setting condition of 2, 3 select switch.

- A/V: 2, 3 select switches can control VIDEO and AUDIO signals.
- VIDEO: 2, 3 select switches can control only VIDEO signals.
- AUDIO: 2, 3 select switches can control only AUDIO signals.

Rear Panel Controls



1. VIDEO INPUT
Input 1~8 video signals.
2. VIDEO OUTPUT
Output the selected video signals in the control board of the front panel.
3. AUDIO INPUT
Input 1~8 L,R audio signals.
4. AUDIO INPUT
Output the selected audio signals in the control board of the front panel.
5. SELECT IN/OUT JACK
Allows to be connected as parallel mode.

PIN NO.	SIGNAL	FUNCTION
1	SEL A INPUT	* Binary input for external control
2	SEL B INPUT	
3	SEL C INPUT	
4	SEL D INPUT	
5	SEL E INPUT	
6	GND	GND
7	GND	GND
8	V-SYNC OUTPUT	Vertical sync output
9	SEL A OUTPUT	* Binary output for external control
10	SEL B OUTPUT	
11	SEL C OUTPUT	
12	SEL D OUTPUT	
13	SEL E OUTPUT	
14	GND	GND
15	GND	GND

6. RS-232C JACK

It allows to be connected PC with VAMS-0808 by RS-232 communication port.

It's possible to control VAMS-0808 by PC.

RS-232C output terminal

PIN NO.	SIGNAL	FUNCTION
1	NC	
2	RXD	RS-232C TERMINAL
3	TXD	RS-232C TERMINAL
4	GND	GND
5	GND	GND
6	NC	
7	NC	
8	NC	
9	NC	

7. ~AC INPUT

Power source input.

RS-232C Operation

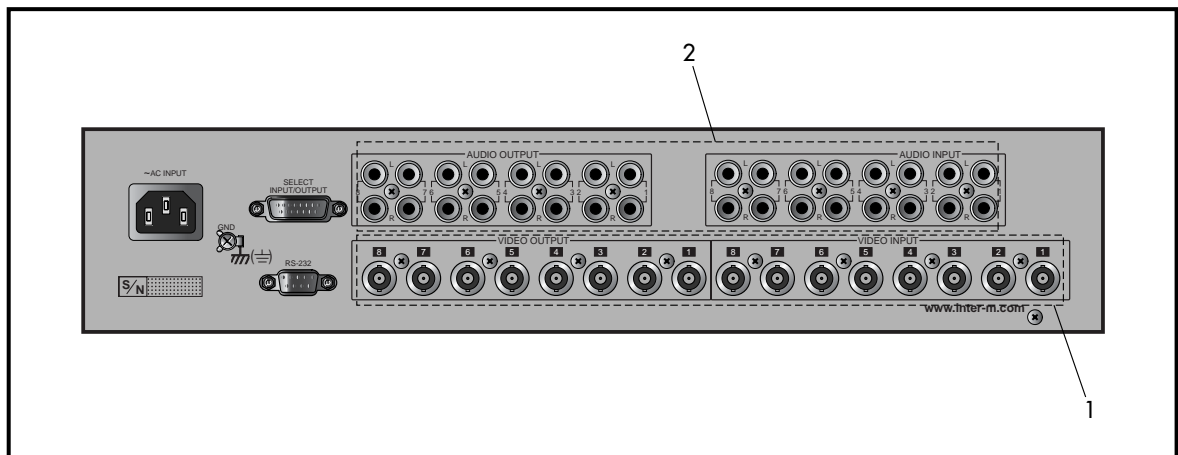
- PROTOCOL

RS-232C-STANDARD
 START BIT: 1 BIT
 STOP BIT: 1 BIT
 DATA BIT: 8 BIT
 PARITY BIT: NONE
 DATA RATE: 9600 BPS
 CODE: ASCII
 TERMINATE

Installation

1. CONNECTION OF VIDEO DEVICES

Video inputs and outputs may be connected to the BNC type connectors located on the rear panel of VAMS-0808.



2. CONNECTION OF AUDIO DEVICES

Audio inputs and outputs may be connected to the RCA type connectors located on the rear panel of VAMS-0808.

L and R of the RCA type connectors need to be connected exactly.

Using the Matrix

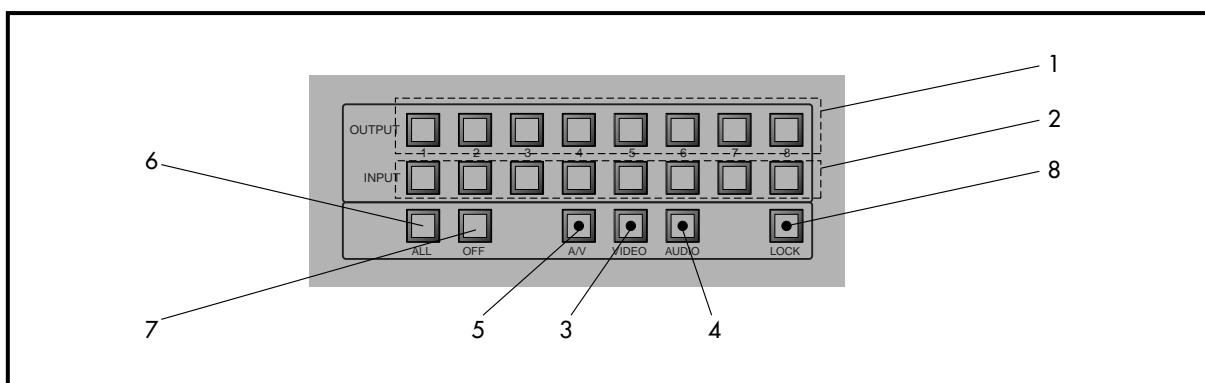
- POWERING THE MACHINE

Connect the AC CORD which is involved in the carton box with the “~AC INPUT” located on the rear of the machine.

Plug the AC CORD to the power source (220V/60Hz or 230V/50Hz), then turn on the power switch located on the front panel of VAMS-0808.

If the connection is correct, the green light of power switch will be turned on.

- USING THE CONTROL SWITCH OF THE FRONT PANEL



1. SELECTING AN OUTPUT

To select an output, press one of the number of OUTPUT switch button.

For example, to select output NO1, press output switch button NO1 of the front panel.

At this time, status display NO1 located on left of the front panel is blinked for 10 seconds approximately.

Like this, any outputs can be selected.

These buttons correspond to output connectors as marked on the rear panel of VAMS-0808.

2. SELECTING AN INPUT

To select an input, press one of the number of INPUT switch button.

For example, to indicate input NO1 to output NO1, press output switch button NO1 and select input switch button NO1 when status display NO1 is blinked. Then the blinking of the status display is stopped and input NO1 is selected.

These buttons correspond to input connectors as marked on the rear panel of the machine.

3. SELECTING A VIDEO

Only to control a video, press VIDEO switch button. Confirm that the green light of the video switch button is turned on.

4. SELECTING A AUDIO

Only to control a audio, press AUDIO switch button. Confirm that the green light of the audio switch button is turned on.

5. SELECTING A VIDEO/AUDIO

To control a video and audio simultaneously, press A/V switch button. Confirm that the green light of the A/V switch button is turned on.

6. USING THE ALL FUNCTION

To control all outputs simultaneously, press the ALL switch button.

For example, to display all output to input NO1, press the ALL switch button. Confirm that all status display are blinked. After that, press input NO1. Then the blinking is stopped and all status display indicate NO1.

7. USING THE OFF FUNCTION

VAMS-0808 has a function that disconnects each output or all outputs.

For example, To disconnect output NO1, Press the OUTPUT switch button NO1 and press the OFF switch button when the status display NO1 is blinked.

Like this, to disconnect all outputs, press the ALL switch button. Then press the OFF switch button when all status displays are blinked.

8. USING THE LOCK FUNCTION

VAMS-0808 has a LOCK function to preserve a configuration from user's mishandling. To lock this machine, press the LOCK switch button 5 times repeatedly, confirm that the green light of the LOCK switch button is turned on. To recall the unit, press the LOCK switch button 5 times, confirm that the green light of the LOCK switch button is turned off.

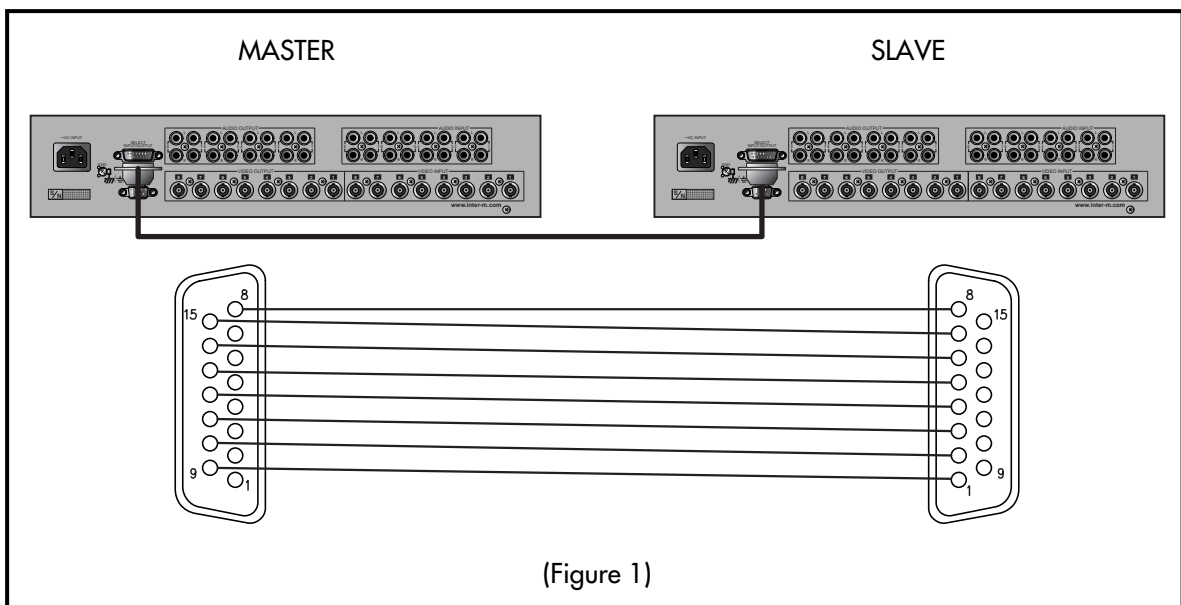
- USING THE CONTROL TERMINAL OF THE REAR PANEL

1. CONNECTING PARALLEL WITH OTHER VAMS-0808 (MASTER AND SLAVE)

It allows to be controlled slave VAMS-0808 which is connected parallelly with master by external connection jack. The operations of master affects them of slave equally.

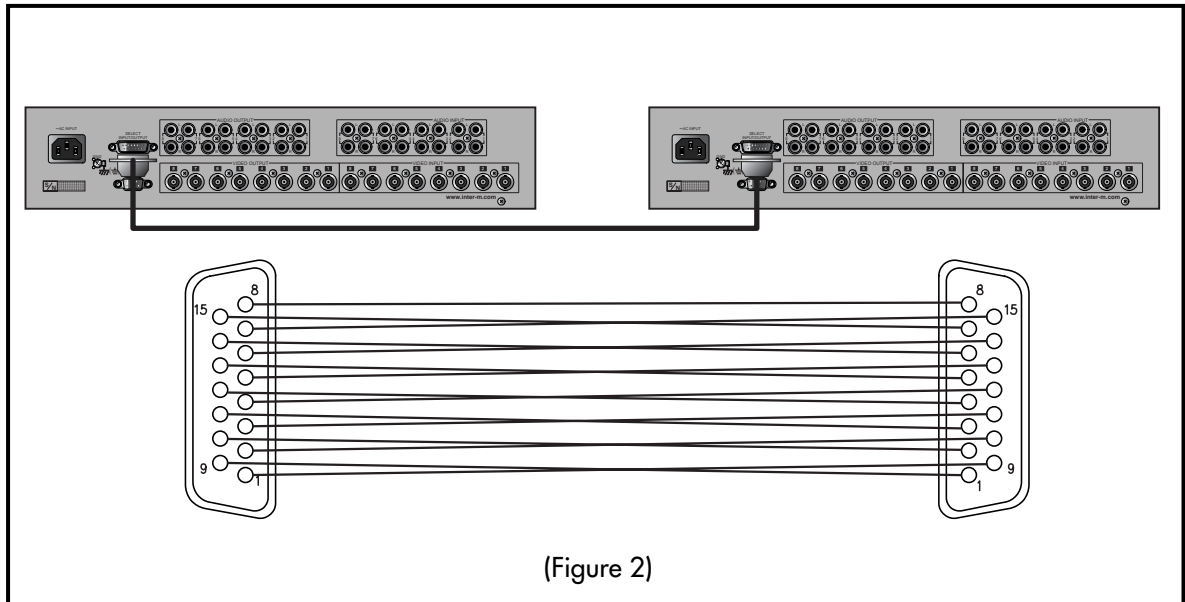
First of all, Make the cable which can connect IN/OUT SELECT of the rear panel using 15P D-SUB jack (figure 1).

After connecting two matrix systems with cable, confirm that the operation of MASTER and the operation of SLAVE is the same when master is controlled.



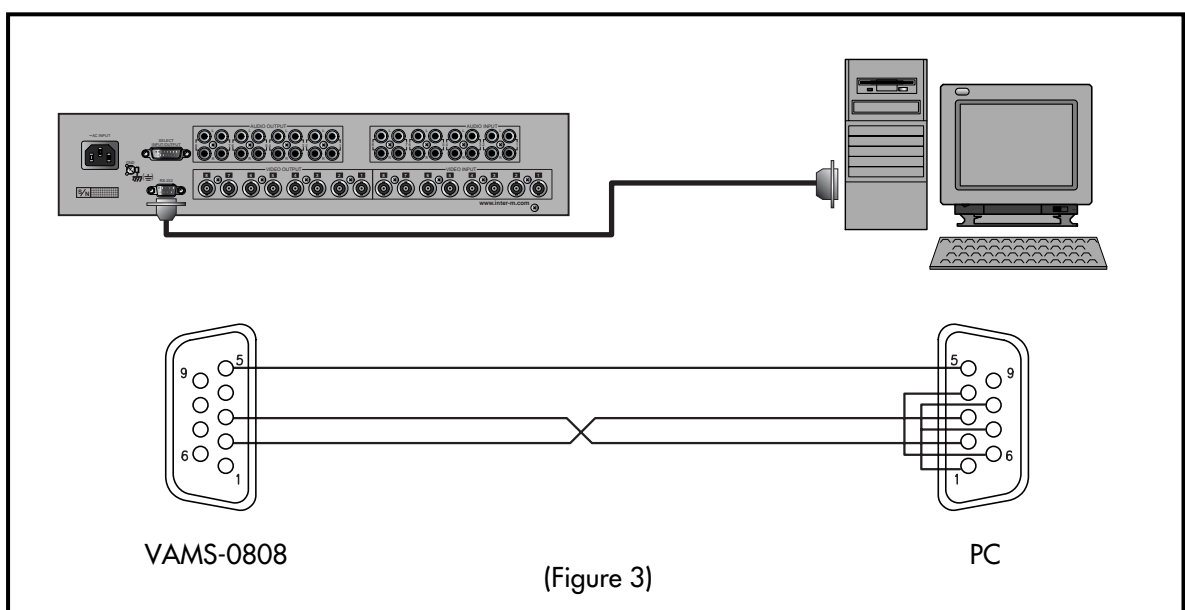
2. PARALLEL CONNECTION

Two VAMS-0808 can be connected as two masters by connecting external jack each other. First of all, Make the cable which can connect IN/OUT SELECT of the rear panel using 15P D-SUB jack (figure 2)
After connecting two matrix systems with cable, confirm that two VAMS-0808 operate as MASTER which can control other machine.

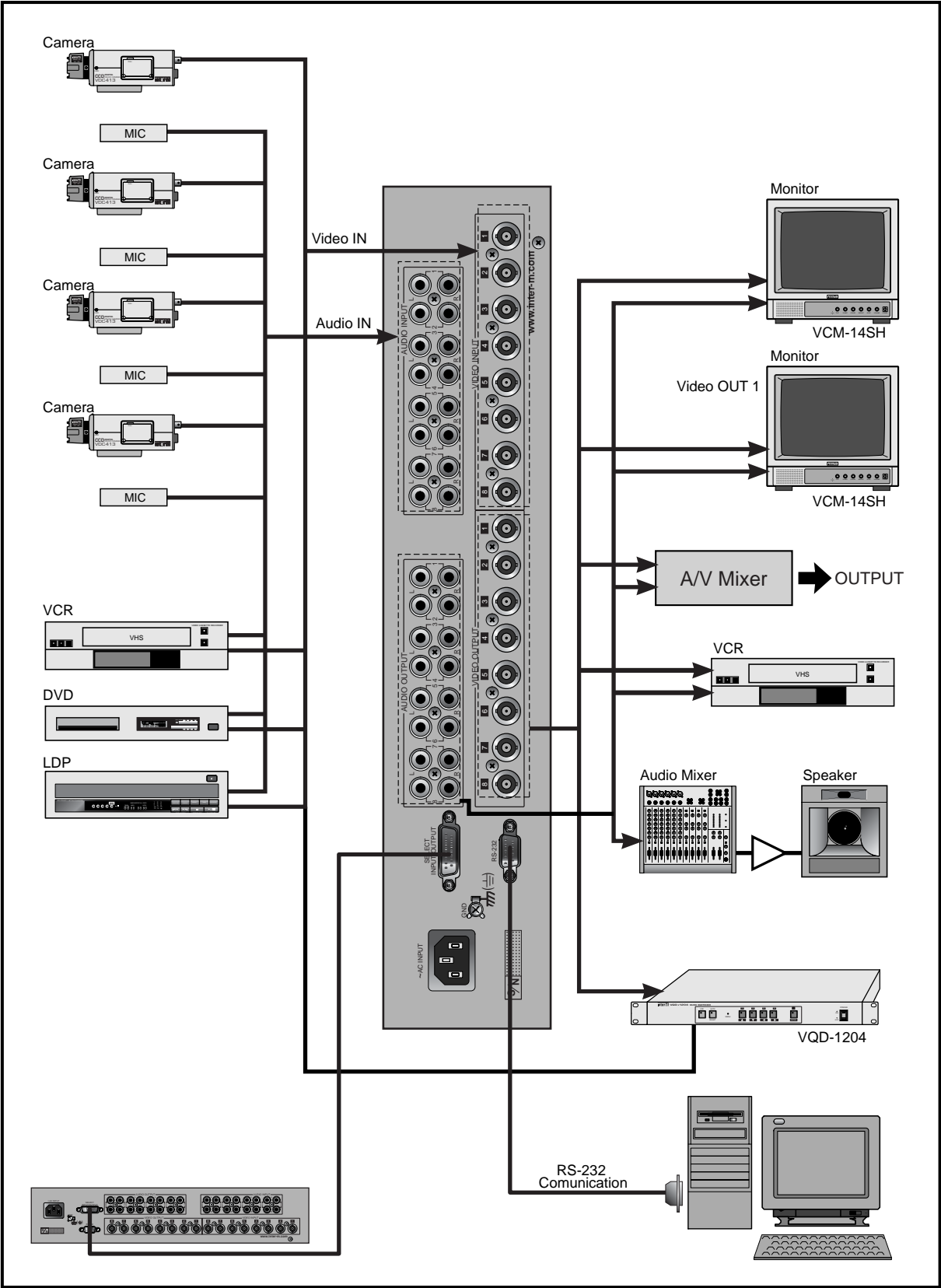


3. CONNECTING WITH PC

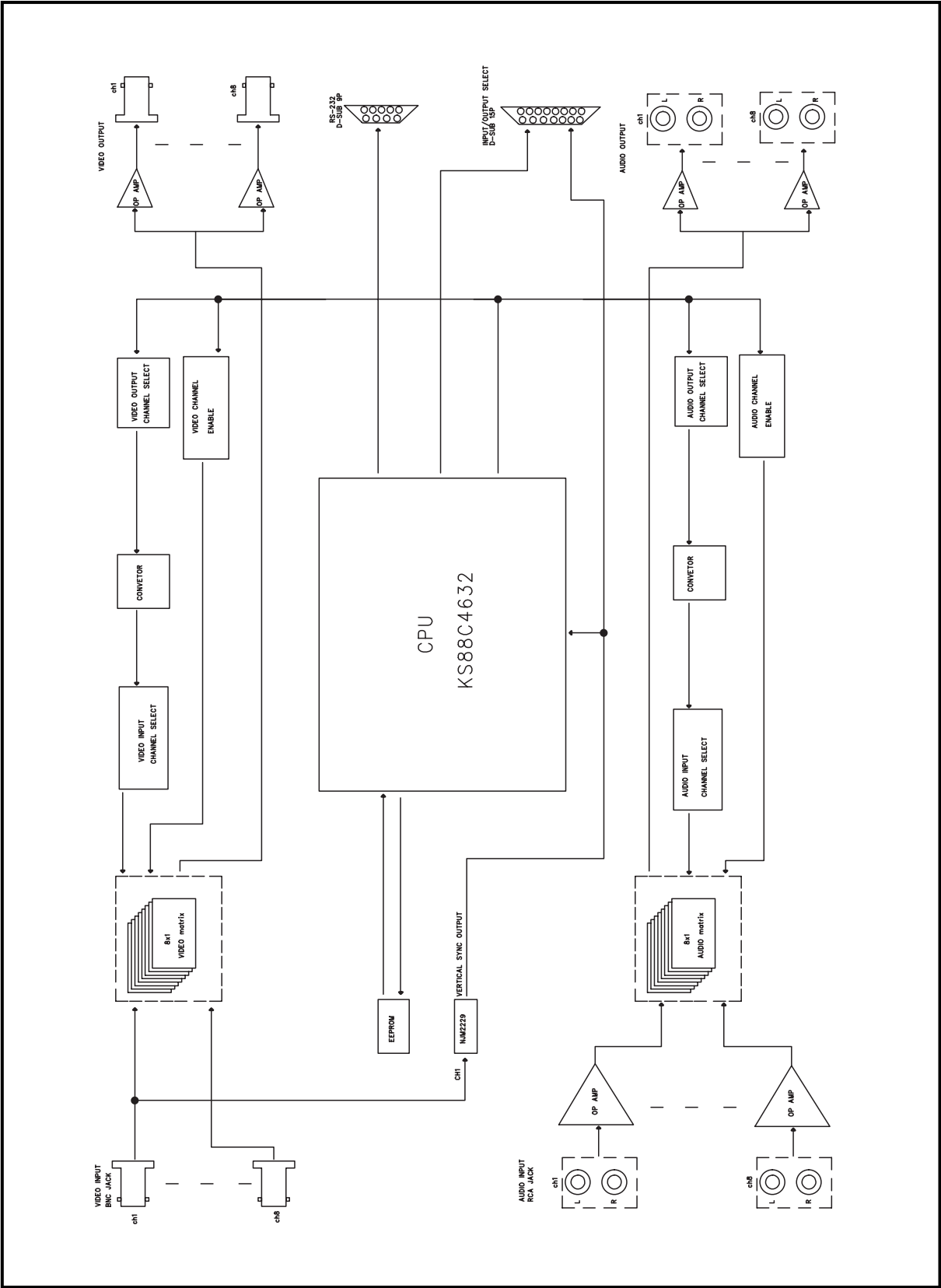
It's possible to control VAMS-0808 by PC with control program (RS-232C communication interface)
First of all, make the cable which can connect PC using 9P D-SUB jack. Then connect VAMS-0808 with PC using the cable. And execute the control program in PC.
Confirm that the operation of PC and the operation of VAMS-0808 is the same when PC is controlled (figure 3)



Connections



Block Diagram



Specifications

- ELECTRICAL

VIDEO

Input/Output Signal Level	1Vp-p 140 IRE
Input/Output Impedance	75Ω
Input/Output Connector	Composite Video BNC
Frequency Response (7 MHz)	Below ±0.5dB
S/N.....	-60dB
Crosstalk	-60dB

AUDIO

Input/Output Signal Level/Impedance	2.2Vp-p/High Impedance Unbal
Input/Output Connector.....	RCA
T.H.D+N (20Hz~20kHz)	Below 0.1%
Frequency Response (20Hz~20kHz)	Below ±3dB
S/N	Above 90dB
Crosstalk	Below -90dB

CONTROL

CPU.....	KS88C4632
Interface	RS-232C
Data Bit.....	8 bit
Stop Bit	1 bit
Parity.....	None Parity

- GENERAL

Power Source	AC 110V-240V, 50/60Hz
Dimensions	482(W) × 88(H) × 220(D)mm

* Specifications and design subject to change without notice for improvements.

